

Amendments Pursuant to 37 C.F.R. 1.121

IN THE CLAIMS:

Please amend claims 1 and 3 as follows. Claims 1 – 9 remain in the application.

1. (Currently Amended) A coplanar line comprising:

a first rectangular slab of a horizontally stacked ~~vertical~~ multi-layered stack of rectangular slabs of dielectric material, said first rectangular slab having a first side, a second side and two edges;

a second rectangular slab of said horizontally stacked ~~vertical~~ multi-layered stack of rectangular slabs of dielectric material, wherein said second rectangular slab is stacked adjacent to said first rectangular slab along a horizontal direction;

said second rectangular slab having a dielectric constant less than 30 and ~~positioned adjacent and substantially parallel to said second side of said first rectangular slab of dielectric material, said second rectangular slab of dielectric material having a~~ dielectric constant that is less than the dielectric constant of said first rectangular slab of dielectric material;

a first electrode adjacent to said first side of said first rectangular slab of dielectric material and a second electrode adjacent to said second side of said first rectangular slab of dielectric material for applying a controllable voltage across said first rectangular slab of dielectric material thereby controlling a dielectric constant of said first rectangular slab of dielectric material;

a center strip conductor ~~conductor~~ positioned adjacent to a first edge of each of said first and second rectangular slabs of dielectric material; and

first and second ground planes positioned on opposite ends of said centerstrip conductor.

2. (Previously Amended) A coplanar line as recited in claim 1, further comprising:

means for applying a controllable voltage across said second rectangular slab of dielectric material, thereby controlling the dielectric constant of said second rectangular slab of dielectric material.

3. (Currently Amended) A coplanar line as recited in claim 1, further comprising:

a plurality of additional rectangular slabs of dielectric material within said horizontally stacked multi-layered stack of rectangular slabs ~~vertical multi-layered stack of rectangular slabs of dielectric material positioned substantially parallel to said first and second rectangular slabs of dielectric material~~, said additional rectangular slabs of dielectric material include at least one layer having a tunable dielectric constant.

4. (Previously Amended) A coplanar line as recited in claim 3, wherein said first, second and additional layers of dielectric material are assembled into a plurality of subassemblies, said subassemblies having the same arrangement of dielectric materials.

5. (Previously Amended) A coplanar line as recited in claim 1, wherein said first rectangular slab of dielectric material has dielectric constant greater than about 100 and a loss tangent of less than about 0.01.

6. (Previously Amended) A coplanar line as recited in claim 1, wherein said second rectangular slab of dielectric material is selected from the group consisting of a $\text{Ba}_{1-x}\text{Sr}_x\text{TiO}_3$ composite where x ranges from zero to one, alumina, mica, and air.

7. (Previously Amended) A coplanar line as recited in claim 1, wherein said first and second rectangular slabs of dielectric material is selected from the group consisting of bulk, tape, thick film and thin film layers.

8. (Previously Amended) A coplanar line as recited in claim 1, wherein said first and second rectangular slabs of dielectric material each have a thickness less than about one tenth of the wavelength of a radio frequency signal to be transmitted through the coplanar line.

9. (Previously Amended) A coplanar line as recited in claim 1, wherein said first rectangular slab of dielectric material is selected from the group consisting of BSTO, BSTO-MgO, BSTO-MgAl₂O₄, BSTO-CaTiO₃, BSTO-MgTiO₃ and BSTO-MgSrZrTiO₆.